**Theodore Baums & Ronald J. Gilson, The Legal Infrastructure of the German Venture Capital Market: Replicating the U.S. Template** (unpublished manuscript)

\* \* \*

**I. An Overview of the Organizational and Contractual Structure of U.S. Venture Capital**

An overview of the U.S. venture capital market begins with its funding sources. Institutional investors dominate U.S. venture capital. Over the four years between 1992 and 1995, institutional investors – pension funds, banks, insurance companies, and endowments and foundations – represented over 75 percent of the total capital raised by venture capital funds. In particular, pension funds alone on average represented more than 46 percent of total capital raised.[[1]](#footnote-1)1 These institutions typically invest through intermediaries – venture capital limited partnerships, usually called “venture capital funds,” in which the investors are passive limited partners.[[2]](#footnote-2)2 Venture capital funds are typically blind pools. At the time an institution decides whether to participate in a venture capital fund, it receives an offering memorandum that discloses the fund’s investment strategy – for example, that the fund will specialize in a particular industry, like the internet, or a distinct development stage, like early stage investments. However, the particular companies in which the fund will invest are not yet known. Consistent with the legal rules governing limited partnerships, the limited partners may not participate in the day to day management of the fund’s business, including especially the approval of particular portfolio company investments.[[3]](#footnote-3)3 In this respect, the venture capital fund’s governance structure formalizes the standard Berle-Means problem of the separation of ownership and control.[[4]](#footnote-4)4 The general partner (GP) puts up only one percent of the capital, but receives essentially complete control over all of it.[[5]](#footnote-5)5 The particular terms of the fund’s governance are set out in the limited partnership agreement.[[6]](#footnote-6)6

The GP actually makes and monitors the venture capital fund’s investments. The GP is typically itself a company comprised of investment professionals, which expects to continue in the venture capital market by raising successive funds after the capital in a particular fund has been invested in portfolio companies. Commonly the GP will begin seeking investors for a successor fund by the midpoint of the existing funds fixed, typically ten year, term. At the close of the partnership’s fixed term, liquidation is mandatory. Indeed, the partnership will be in partial liquidation during much of its term because realized profits are required to be distributed to the limited partners on an annual basis.[[7]](#footnote-7)7 The GP’s principle contribution to the venture capital fund is expertise, not capital. This is reflected in the ratio of capital contributions. In most funds, the GP contributes one percent of the fund’s capital, while the limited partner investors contribute the remaining 99 percent.

The GP’s compensation is also skewed. The GP usually receives an annual management fee for its services, but the fee is relatively small, usually 2.5 percent of committed capital.[[8]](#footnote-8)8 The primary return to the general partner is a carried interest – that is, a right to receive a specified percentage of profits realized by the partnership. Twenty percent is a common figure.[[9]](#footnote-9)9 The GP generally receives its carried interest at the same time that distributions are made to the limited partners, subject to two limitations. First, general partners typically receive no distributions until the limited partners have received an amount equal to their capital contributions, sometimes with interest. Second, distributions to the GP are subject to certain “claw back” provisions that ensure that the order of distribution does not affect the ultimate percentage of profits received by the GP.

The venture capital fund’s equity investments in portfolio companies typically take the form of convertible preferred stock.1[[10]](#footnote-10)0 While not required by the formal legal documents, the fund is also expected to make important non-cash contributions to the portfolio company. These contributions consist of management assistance, corresponding to that provided by management consultants; intensive monitoring of the portfolio company’s performance which provides an objective view to the entrepreneur; and the use of the fund’s reputation to give the portfolio company credibility with potential customers, suppliers, and employees.1[[11]](#footnote-11)1 While each investment will have a “lead” investor who plays the primary role in monitoring and advising the portfolio company, commonly the overall investment is syndicated with other venture capital funds that invest in the portfolio company at the same time and on the same terms.1[[12]](#footnote-12)2

The initial venture capital investment usually will be insufficient to fund the portfolio company’s entire business plan. Accordingly, investment will be "staged." A particular investment round will provide only the capital the business plan projects as necessary to achieve specified milestones set out in the business plan.1[[13]](#footnote-13)3 While first round investors expect to participate in subsequent investment rounds,1[[14]](#footnote-14)4 they are not contractually obligated to do so even if the business plan’s milestones are met; the terms of later rounds of investment are negotiated at the time the milestones are met and the prior investment exhausted. Like the provision of non-capital contributions, implicit, not explicit contract governs the venture capital fund’s right and obligation to provide additional rounds of financing if the portfolio company performs as expected. The venture capital fund’s implicit right to participate in subsequent rounds is protected by an explicit right of first refusal.

A critical feature of the governance structure created by the venture capital fund’s investment in the portfolio company is the disproportionate allocation of control to the fund.1[[15]](#footnote-15)5 In direct contrast to the familiar Berle-Means governance structure where the outside investors have disproportionately less control than equity, the governance structure of a venture capital-backed early stage, high technology company allocates to the venture capital investors disproportionately greater control than equity. It is common for venture capital investors to have the right to name a majority of a portfolio company’s directors even though their stock represents less than a majority of the portfolio company’s voting power.1[[16]](#footnote-16)6 Additionally, the portfolio company will also enter into a series of contractual negative covenants that require the venture capital investors’ approval before the portfolio company can take certain business decisions, such as acquisition or disposition of significant amounts of assets, or a material deviation from the business plan. The extent of these negative covenants is related to whether the venture capital investors have control of the board of directors; board control acts as a partial substitute for covenant restrictions.1[[17]](#footnote-17)7

These formal levers of control are complemented by the informal control elements that result from the staged financing structure. Because a financing round will not provide funds sufficient to complete the portfolio company’s business plan, staged financing in effect delegates to the investors, in the form of the decision whether to provide additional financing, the decision whether to continue the company’s project.1[[18]](#footnote-18)8

Two final characteristics of investments in portfolio companies concern their terms and their expected performance. While these are not short-term investments, neither are they expected to be long-term. Because venture capital limited partnerships have limited, usually10 year terms,1[[19]](#footnote-19)9 GP’s have a strong incentive to cause the fund’s portfolio company investments to become liquid as quickly as possible. Assuming that the GP has invested all of a fund’s capital by the midpoint of the fund’s life, the GP then must seek to raise additional capital for a new fund in order to remain in the venture capital business. Because the performance of a GP’s prior funds will be an important determinant of its ability to raise capital for a new fund, early harvesting of a fund’s investments will be beneficial.2[[20]](#footnote-20)0 Venture capital funds exit successful investments by two general methods: taking the portfolio company public through an initial public offering of its stock (an “IPO”); or selling the portfolio company to another firm. The likelihood of exit by an IPO or a sale has differed over different periods. Between 1984 and 1990, 396 venture capital-backed firms went public, while 628 such firms were sold to other firms before going public. Between 1991 and 1996, the order reversed, with 1059 firms going public and 524 being sold.2[[21]](#footnote-21)1 While it is not uncommon for the terms of a venture capital preferred stock investment to give the venture capital fund the right to require the portfolio company to redeem its stock, redemption is not a viable exit mechanism because portfolio companies lack the funds to effect the redemption.2[[22]](#footnote-22)2 Such put rights are better understood as a control device that can force the portfolio company to accommodate the fund’s desire to exit by way of IPO or sale.

The fact that portfolio company investments are of limited duration rather than long term is critical to the operation of the venture capital market.2[[23]](#footnote-23)3 The non-cash contributions made by the venture capital fund to the portfolio company – management assistance monitoring, and service as a reputational intermediary – share a significant economy of scope with its provision of capital. The portfolio company must evaluate the quality of the fund’s proffered management assistance and monitoring, just as potential employees, suppliers and customers must evaluate the fund’s representations concerning the portfolio company’s quality. Combining financial and nonfinancial contributions enhances the credibility of the information the venture capital fund proposes to provide the portfolio company and third parties. Put simply, the venture capital fund bonds the accuracy of its information with its investment.

 The importance of the portfolio company investment’s limited duration reflects the fact that the venture capital fund’s non-cash contributions have special value to early stage companies. As the portfolio company gains its own experience, and develops its own reputation, the value of the venture capital fund’s provision of those elements declines. By the time a portfolio company succeeds, and the venture capital fund’s exit from the investment is possible, the fund’s non-cash contributions can be more profitably invested in a new round of early stage companies. But because of the economies of scope between cash and non-cash contributions, recycling the venture capital fund’s non-cash contributions also requires recycling its cash contributions. Exit from a fund’s investments in successful portfolio companies thus serves to recycle its cash and, therefore, its associated non-cash contributions from successful companies to early stage companies.

The risk associated with portfolio company investments is reflected in the variability of returns. While some investments return many multiples of the original investment, a survey of the performance of venture capital-backed companies, not limited to early stage technology companies and therefore presenting less uncertainty than the category of investments that concern us here, reports wide variation in returns. In the sample studied, 50 percent of the total return was provided by only 6.8 percent of the investments. Over a third of the investments resulted in partial or total loss.2[[24]](#footnote-24)4

**II. The Economics of Venture Capital Contracting: the Special Problems of Uncertainty, Information Asymmetry, and Agency Costs**

All contracts respond to three central problems: uncertainty, information asymmetry, and agency costs. The special character of venture capital contracting is shaped by the fact that investing in early stage, high technology companies presents these three problems in extreme form. Precisely because the portfolio company is at an early stage, uncertainty concerning future performance is magnified. Virtually all of the important decisions bearing on the company’s success remain to be made, and most of the significant uncertainties concerning the outcome of the company’s efforts remain unresolved. To the extent the entrepreneur is beginning her first company, additional uncertainty concerns the quality of the company’s management, which takes on heightened importance because so large a portion of the portfolio company’s value depends on management’s future decisions. Finally, the technology base of the portfolio company’s business exacerbates the general uncertainty by adding scientific uncertainty – the entrepreneur’s beliefs about the underlying science sought to be commercialized may prove incorrect. Some evidence of the extent of uncertainty appears from the large variance in returns from portfolio company investments.2[[25]](#footnote-25)5

The same factors expand the information asymmetries between potential investors and entrepreneurs, as intentions and abilities are far less observable than actions already taken. Similarly, the fact that the portfolio company’s technology involves cutting edge science assures that the information asymmetry between the entrepreneur, typically directly involved in the company’s research effort, and the venture capital fund, even if the fund employs individuals with advanced scientific training, will be unusually wide.

Finally, the importance of future managerial decisions in an early stage company whose value depends almost entirely on future growth options, creates potentially very large agency costs,2[[26]](#footnote-26)6 which are in turn amplified by the significant variance associated with an early stage, high technology company’s expected returns. Because the entrepreneur’s stake in a portfolio company with venture capital financing can be fairly characterized as an option, the entrepreneur’s interests will sharply diverge from those of the venture capital investors, especially with respect to the risk level and duration of the investment.2[[27]](#footnote-27)7

The organizational and contractual structure of the U.S. venture capital market responds to this trio of problems. The effectiveness of the response serves to make the venture capital market feasible. Absent a workable response, the extremity of uncertainty, information asymmetry, and agency problems likely would raise the cost of external capital to a point of market failure, leading to a similar collapse in the formation of early stage, high technology companies. Because of the link between firm size and innovation,2[[28]](#footnote-28)8 institutional and contractual techniques thus have an important influence on the successful commercialization of cutting edge science.

The organizational and contractual techniques observed in the venture capital market reflect three basic characteristics. First, very high power *incentives* for all participants – investors, GPs, and entrepreneurs – are coupled with very intense *monitoring*.2[[29]](#footnote-29)9 Second, the organizational and contractual structure reflects the use of both explicit and implicit contracts. Thus, the governance structure of both the portfolio company and the venture capital fund is composed of market as well as formal aspects. Third, a pivotal aspect of this mix of formal and market governance, especially repeat play and reputation mechanisms, is that the two contracting nodes which comprise the venture capital market – the venture capital fund limited partnership agreement and the portfolio company investment contract, are determined simultaneously. As we will see, this braiding of the two relationships facilitates the resolution of problems internal to each.

In this Part, we show how multiple forms of incentive and monitoring techniques, including contractual, control, and market mechanisms, operate in connection with each contracting node to resolve the problems of uncertainty, information asymmetry and agency associated with early stage, high technology financing. We consider first the venture capital fund-portfolio company contract and then turn to the investor-venture capital fund limited partnership agreement. Finally, we consider the importance of the braiding of these two contracts.

**A. The Venture Capital Fund-Portfolio Company Contract**

Five organizational and contractual techniques discussed in Part I – staged financing, allocation of elements of control, form of compensation, the role of exit, and reliance on implicit contracts – respond to the problems poseded by financial contracting in the face of extreme forms of uncertainty, information asymmetry, and agency costs.

1. Staged Financing. As discussed in Part I, venture capital investments are usually staged, with funding decisions keyed to milestones in the business plan. Because the venture capital fund has the right, but not the obligation, to fund subsequent stages of development, the structure gives the investor a valuable option to abandon. This structure responds directly to the *uncertainty* associated with contracting for early stage, high technology investments. The milestones in the business plan are keyed to events that, because their occurrence reveals important information, reduce the uncertainty associated with the project’s ultimate success. Thus, a first milestone may be the creation of an operating prototype, which eliminates uncertainty about the portfolio company’s ability to reduce its science to a commercial product. The decision about additional investment is then made only after the passage of time and performance has replaced projection with fact. The result is to reduce the uncertainty associated with the funding of further rounds of investment.3[[30]](#footnote-30)0

Without more, however, staged financing does not increase the expected value of the portfolio company's project. To be sure, the investor receives an option to abandon, but the value of that option to the recipient is exactly balanced by the cost of option to its writer, the entrepreneur. Absent an unrealistic assumption about investor risk aversion, merely shifting exogenous uncertainty from the investor to the entrepreneur does not create value.3[[31]](#footnote-31)1 For this to occur, staged financing must accomplish something more.

The first respect in which staged financing creates, rather than merely transfers, value is its reduction in the *agency problems* associated with the entrepreneur’s management of the portfolio company’s operation. Staged financing aligns the interests of the venture capital fund and the entrepreneur by creating a substantial performance incentive. If the portfolio company does not meet the milestone whose completion was funded in the initial round of financing, the venture capital fund has the power to shut the project down by declining to fund the project’s next round.3[[32]](#footnote-32)2 Even if the venture capital fund chooses to continue the portfolio company’s project by providing another round of financing, a performance penalty still can be imposed by assigning the portfolio company a lower value for purposes of the price paid in the new round. To be sure, the portfolio company may seek financing from other sources if the existing investors decline to go forward, or are willing to go forward only at an unfavorable price, but the overall contractual structure significantly reduces the availability of a market alternative.

First, potential investors know they are being solicited only because investors in the prior round are dissatisfied with the portfolio company’s performance. Second, the investors rights agreement gives the venture capital fund a right of first refusal with respect to future financing that serves as a substantial deterrent to potential alternative investors. Such an investor will be reluctant to make the investment in information necessary to deciding whether to make an investment knowing that that investment will at least be significantly reduced if the terms negotiated turn out to be attractive, since the existing investors will have the right to take part or all of the transaction for themselves. Moreover, a potential investor will confront a serious winner’s curse problem. The potential investor can anticipate that if the price negotiated is attractive, the existing investors will opt to make the investment themselves. Thus, the potential investor knows that it will be allowed to make the investment only if the existing investors, who have better information about the project, believe that the investment is unattractive.

Staged financing also reduces agency costs by shifting the decision whether to continue the project from the entrepreneur to the venture capital fund. Because of the option-like character of the entrepreneur’s interest in the portfolio company, she will go forward with the project under conditions that favor her and disfavor the venture capital fund. Shifting this decision to the venture capital fund reduces this source of agency cost.

The incentive created by staged financing in turn operates to reduce uncertainty in a manner that creates value, rather than merely shifting it from the investor to the entrepreneur. While staged financing only shifts risk with respect to exogenous uncertainty – that is, uncertainty which is outside the parties’ capacity to influence – it can serve actually to reduce a different kind of uncertainty. Some uncertainty associated with the success of the portfolio company’s project is endogenous: it can be influenced by the entrepreneur’s actions. Put differently, the likelihood of the portfolio company’s success is in part a function of the effort expended. By increasing the incentives to expend effort, staged financing reduces this element of uncertainty.

That brings us to the effect of staged financing on the *information asymmetry* between the venture capital fund and the entrepreneur. Staged financing serves to bridge the information gap in two important ways. The first information-related property of staged financing reflects the general principle that every incentive has an information related flip side that responds to adverse selection problems. In deciding which portfolio companies to fund, the venture capital fund has to distinguish between good and bad entrepreneurs under circumstances in which an entrepreneur has better information about her own skills than does the investor. Because the incentive created by staged financing is more valuable to a good entrepreneur than a bad one, an entrepreneur’s willingness to accept an intense incentive is a signal of the entrepreneur’s difficult to observe skills. The signal is particularly important for early stage and high technology portfolio companies because the absence of a performance history and the technical nature of the projects makes the entrepreneur’s skills particularly difficult to observe.3[[33]](#footnote-33)3

The second way in which staged financing reduces information asymmetry is by its impact on the credibility of the projections contained in the entrepreneur’s business plan. These projections are critical to valuing the portfolio company and therefore pricing the venture capital fund’s investment. Yet, the entrepreneur obviously has better information concerning the accuracy of the business plan’s projections of timing, costs, and likelihood of success, and, without more, an incentive to overstate the hproject's prospects. By accepting a contractual structure that imposes significant penalties if the entrepreneur fails to meets specified milestones based on the business plan’s projections -- the venture capital fund's option to abandon then becomes exercisable -- the entrepreneur makes those projections credible.

At this point, it is helpful to note a more general contracting problem associated with the allocation of discretion between parties to an agreement. Discretion creates the potential for the party possessing it to impose agency costs. Staged financing, like other organizational and contractual techniques we will consider, responds to agency problems that result from entrepreneur discretion by shifting that discretion to the venture capital fund. However, this technique has a built in limitation, which we might call the principle of the conservation of discretion. Without more, shifting discretion from the entrepreneur to the fund does not eliminate the potential for agency costs; it merely shifts the chance to act opportunistically to the fund. For example, staged financing coupled with a right of first refusal made potent by high information costs allows the venture capital fund to behave opportunistically in negotiating the price of a second round of financing. The fund is in a position to exploit its monopsony power by reducing the value assigned to the portfolio company even though it has met its projections.3[[34]](#footnote-34)4 In such settings, the goal is to shift discretion to that party whose misuse of it can be most easily constrained. As will appear, misuse of the discretion shifted to the venture capital fund is policed by market forces in the venture capital market, whose functioning is crucial to the feasibility of the entire organizational and contractual structure.

2. Control. A central characteristic of the governance structure created by the venture capital fund-portfolio company contract stands the Berle-Means problem on its head. Instead of investors having disproportionately less control than equity as in public corporations, the venture capital fund has disproportionately more control than equity. Like staged financing, this allocation of control responds to the problems of uncertainty, information asymmetry, and agency associated with early stage, high technology investments.

Extreme *uncertainty* concerning the course and outcome of the project stage being financed creates discretion. The presence of uncertainty means that an explicit stage contingent contract that specifies what action should be taken in response to all possible events cannot be written. Thus, the contractual structure must deal with uncertainty by means of a governance structure: creating a process that will determine the response to an unexpected event. The particular allocation of discretion between the fund and the portfolio company reflects the influence of concerns over both *agency* and *information asymmetry*.

Two types of control are allocated to the venture capital fund as a response to agency and information asymmetry problems. First, as we have seen, staged financing allocates an important periodic lever of control to the venture capital fund. By reserving to itself the decision whether to fund the portfolio company’s next milestone, the venture capital fund takes control over the continuation decision; whether the portfolio company goes forward with its project is determined by whether the venture capital fund provides capital for the next stage. This power, in turn, gives the venture capital fund the incentive to make the investment in monitoring necessary to evaluate the portfolio company’s overall performance over the initial funding period. In the absence of the power to act in response to what it discovers, the venture capital fund would have no reason to expend time and resources in the kind of monitoring necessary to balance the intense incentives created to align the two parties’ interests.

Second, giving the venture capital fund disproportionate representation or even control of the portfolio company’s board of directors, and the restriction of the entrepreneur’s discretion through the use of negative covenants, gives the fund interim control – the power to act to reduce agency costs in the period between decisions over whether to finance further stages. In its most extreme form, the venture capital fund’s interim control carries with it the power to replace the entrepreneur as the portfolio company’s chief executive officer. As with the allocation of periodic control, the allocation of interim control gives the venture capital fund the incentive to monitor the portfolio company’s performance during the course of reaching a funding milestone, and in response to the unexpected events generated by pervasive uncertainty. The discretion unavoidably given to the portfolio company’s day to day managers by the occurrence of unexpected events is policed by the disproportionate control and resulting monitoring activity allocated to the venture capital fund.

The periodic and interim monitoring encouraged by the disproportionate allocation of control to the venture capital fund also serves to reduce the last of the contracting problems – information asymmetry between the venture capital fund and the entrepreneur. The balance of information between the parties is not static as the portfolio company moves forward on its business plan. Ongoing learning by the entrepreneur increases the information disparity and therefore the entrepreneur's discretion, which in turn increases agency costs. Ongoing monitoring by the venture capital fund, made possible by the disproportionate allocation of control, balances that influence.

Finally, as with staged financing, the allocation of control serves to reduce information asymmetry by providing the entrepreneur the opportunity to signal her type. Giving the venture capital fund the power to terminate the entrepreneur in the event of poor performance gives the entrepreneur a powerful incentive to perform. The flip side of this incentive is a signal. By her willingness to subject herself to this penalty for poor performance, the entrepreneur credibly provides information to the venture capital fund about her own skills.3[[35]](#footnote-35)5

3. Compensation. The structure of the entrepreneur’s compensation responds primarily to agency costs and information asymmetry problems. Perhaps more starkly than with any other organizational or contractual technique, the portfolio company’s compensation structure creates extremely high powered performance incentives that serve to align the incentives of the portfolio company management and the venture capital fund. In essence, the overwhelming percentage of management’s compensation is dependent on the portfolio company’s success. Low salaries are offset by the potential for a large increase in value of the entrepreneur’s stock ownership, and by the award of stock options to other management members.3[[36]](#footnote-36)6 The performance incentive is further heightened by the practice of requiring the entrepreneur and other members of management to accept the imposition of a staged vesting requirement on some or all of their stock or stock options. The vesting requirement gives the portfolio company the right to purchase a portion of the entrepreneur’s or other management’s stock, at a favorable price, if employment terminates prior to a series of specified dates. It also restricts exercise of options until after the manager has completed a series of employment anniversaries, following each of which an additional number of options both are exercisable and no longer subject to forfeiture if employment terminates.3[[37]](#footnote-37)7

While aligning the interests of the venture capital fund and entrepreneur in some circumstances, the intensity of these incentives can also lead to agency costs in other circumstances. In particular, the option-like characteristics of the portfolio company’s compensation structure can lead the entrepreneur to increase the risk associated with the portfolio company’s future returns, because the venture capital fund will bear a disproportionate share of the increased downside but share only proportionately in the upside. Thus, the intensity of the performance incentives created by the compensation structure gives rise to a corresponding incentive for the venture capital fund to monitor the portfolio company’s performance. This monitoring, together with the signaling properties of the entrepreneur’s willingness to accept such powerful incentives, also serve to reduce information asymmetries.

4. Exit. Another powerful incentive is created for the entrepreneur by the terms of the disproportionate allocation of control to the venture capital fund. On the plausible assumption that the transfer of control to the venture capital is costly to the entrepreneur,3[[38]](#footnote-38)8 the control structure created by the venture capital fund’s investment gives the entrepreneur a valuable call option on control.3[[39]](#footnote-39)9 In effect, the venture capital fund and the entrepreneur enter into a combination explicit and implicit contract that returns to the entrepreneur the disproportionate control transferred to the venture capital fund if the portfolio company is successful. 4[[40]](#footnote-40)0 The explicit portion of the contract is reflected in the terms of the convertible preferred stock which provide the venture capital fund its disproportionate board representation, and in those of the investors’ rights agreement which contains the negative covenants requiring venture capital fund approval of important operating decisions. Both documents typically provide for the termination of these levers of control on the completion of an IPO of a specified size and at a specified price. The terms of the preferred stock almost universally require conversion into common stock, with the resulting disappearance of special board representation, on a public offering. The negative covenants also expire on an IPO.4[[41]](#footnote-41)1

The implicit portion of the contract operationalizes the definition of success that makes the entrepreneur’s call option on control exercisable. By triggering automatic conversion on an IPO, the measure of success is delegated to independent investment bankers who are in the business of identifying venture capital-backed companies successful enough to be taken public,4[[42]](#footnote-42)2 and whose own incentives make their ex post determination of success credible ex ante. As we will see in the next section, it also allocates to the market enforcement of the venture capital fund’s implicit promise to agree to an IPO when one is available to the portfolio company and the entrepreneur exercises her call option on control by requesting one.

5. Reliance on Implict Contract: The Role of the Reputation Market. Crucial elements of the organizational and contractual techniques that respond to uncertainty, information asymmetry, and agency costs in the venture capital fund-portfolio company relationship, have at their core the transfer of discretion from the entrepreneur to the venture capital fund. Staged financing, by giving the venture capital fund an option to abandon, transfers the continuation decision from the entrepreneur to the fund. Board control by the venture capital fund, including the power to dismiss the entrepreneur herself, disproportionate to its equity, also transfers to the fund the capacity to interfere in the portfolio company’s day to day business. As a result, the effectiveness of these techniques is subject to the conservation of discretion principle. Reducing the agency costs of the entrepreneur’s discretion by transferring it to the venture capital fund also transfers to the venture capitalist the potential for agency costs – the opportunity to use that discretion opportunistically with respect to the entrepreneur.

For example, giving the venture capital fund an option to abandon gives the venture capital fund an incentive to monitor, gives the entrepreneur an incentive to perform, and reduces agency costs by shifting the continuation decision to the venture capitalist. But when coupled with the venture capital fund’s right of first refusal, this transfer of discretion also creates agency costs on the part of the venture capital fund. What prevents the venture capital fund from opportunistically offering to provide the financing necessary for the portfolio company’s next stage only at an unfairly low price? The entrepreneur could seek financing from other sources but, as we have seen, the venture capital fund’s right of first refusal presents a serious impediment.4[[43]](#footnote-43)3 Similarly, the transfer of disproportionate control to the venture capital fund also creates the potential for opportunism by the fund. To align incentives, the entrepreneur’s returns from the portfolio company’s project take the form of appreciation in the value of her portfolio company stock and stock options. However, the venture capital fund’s power to terminate entrepreneur, coupled with the vesting requirements that on her termination both give the portfolio company a favorably priced option to purchase the entrepreneur’s stock on termination and cancel all unvested options, gives the venture capital fund the discretion to behave opportunistically. What prevents the venture capital fund from unfairly terminating the entrepreneur so as to secure for itself the returns that had been promised the entrepreneur?

The conservation of discretion principle counsels that discretion be placed in the party whose behavior is more easily policed. In the context of the venture capital fund-portfolio company relationship, the presence of an effective reputation market with respect to the GP’s characteristics provides the policing that supports the transfer of discretion to the venture capital fund.

For a reputation market to operate, three attributes must be present. The party whose discretion will be policed by the market must anticipate repeated future transactions. Participants must have shared expectations of what constitutes appropriate behavior by the party to whom discretion has been transferred. Finally, those who will deal with the advantaged party in the future must be able to observe whether that party has behaved in past dealings in conformity with shared expectations.4[[44]](#footnote-44)4 All three of these attributes appear present in the venture capital market.

Although it is unlikely that a GP will have future dealings with the same entrepreneur,4[[45]](#footnote-45)5 as we have seen the GP will anticipate raising successor venture capital funds, which in turn will require future dealings with different entrepreneurs in connection with the investing the new funds’ capital. The requirements of shared expectations of proper conduct, and the observability of a GP’s satisfaction of those expectations, also appear to be met in the venture capital market. The community of venture capital funds is relatively concentrated,4[[46]](#footnote-46)6 and remarkably localized. For example, the offices of a significant percentage of U.S. venture capital funds are found along a short strip of Sand Hill Road in Silicon Valley.4[[47]](#footnote-47)7 Moreover, venture capital funds typically concentrate their investments in portfolio companies geographically proximate to the fund’s office.4[[48]](#footnote-48)8 This geographical concentration of providers and users of venture capital facilitates satisfaction of the informational element of the structure of a reputation model. Saxanian notes that geographical proximity has fostered in Silicon Valley extremely efficient informal transfers of information concerning the performance of GPs and entrepreneurs.4[[49]](#footnote-49)9 Credible accounts of opportunistic behavior by particular GPs can be expected to circulate quickly among members of the entrepreneur community who must select a GP with whom to deal, and among members of the GP community, who must compete among themselves for the opportunity to invest in the most promising portfolio companies and therefore have an interest in noting and transmitting to the entrepreneur community instances of misbehavior by a rival.

**B. The Investor-Venture Capital Fund Contract**

In this part, we turn to the investor-venture capital fund contract. How do the organizational and contractual techniques discussed in Part I – virtually complete control vested in the GP, incentive compensation, mandatory distribution of realized investments, and mandatory liquidation after a fixed term5[[50]](#footnote-50)0 – respond to the problems of financial contracting in the face of extreme forms of uncertainty, information asymmetry, and agency costs?5[[51]](#footnote-51)1

1. Control. Organizing the venture capital fund as a limited partnership serves to vest virtually complete control in the GP. Short of participation in largely inconsequential advisory committees and the right, typically restricted by the limited partnership agreement, to replace the GP, the legal rules governing limited partnership prevent investors from exercising control over the central elements of the venture capital fund’s business. Most important, the investors are prohibited from insisting on an approval right of the GP’s investment decisions. Thus, the venture capital fund’s formal governance structure presents an extreme version of the Berle-Means problem of the separation of ownership and control: the GP receives control grossly disproportionate to either its one percent capital contribution or its 20 percent carried interest.

The efficiency explanation for the allocation of control to the GP reflects in the first instance the extreme uncertainty and information asymmetry associated with investing in early stage, high technology portfolio companies. By investing through a financial intermediary, investors secure the benefit of the GP’s skill and experience that help to reduce the level of uncertainty and information asymmetry that must be addressed in the contract governing a portfolio company’s investment. However, securing the benefit of the GP’s expertise comes at a cost: the GP must be given the discretion necessary to exercise its skills and experience on the investors’ behalf. And consistent with the principle of the conservation of discretion, the allocation of control to the GP creates the potential for agency costs that must be addressed by other elements of the venture capital fund’s organizational and contractual structure.

2. Compensation. The GP’s compensation structure is the front line response to the potential for agency costs resulting from allocating to the GP the control necessary to apply its skill and expertise on behalf of the investors. The bulk of the GP’s compensation comes in the form of a carried interest, typically 20 percent, that gives the GP 20 percent of the venture capital fund’s ultimate profits, distributed to the general partner when realized profits are distributed to the investor limited partners. Thus, the compensation structure aligns the GP’s interests in the fund’s success with those of the investors: the GP earns returns that are proportional to those earned by the investors. However, other agency problems appear in the details of the carried interest. For example, suppose that the first investment realized by the venture capital fund yields a $1 million profit after a return to the investors of their $1 million investment. The GP’s share of the profit is $200,000. Now suppose that the next investment realized loses $500,000, leaving cumulative profits from the two investments of $500,000. If the GP keeps all of its first $200,000 distribution, then it ends up having received not 20 percent of the venture capital fund’s profits from the two investments, but 40 percent ($200,000/$500,000). This would give the GP an incentive to realize profitable investments before unprofitable investments, even if that meant realizing the profitable investments prematurely. Various formulations of what are called “claw back” provisions respond to the potential agency cost growing out of this element of uncertainty by in one fashion or another either delaying the GP’s distribution, or holding back some portion it, until the fund’s ultimate success is known.5[[52]](#footnote-52)2

3. Mandatory Distributions and Fixed Term. While aligning the interests of the GP and the investors, the intensity of the GP’s compensation incentive in turn creates a different agency cost. The GP’s carried interest has option-like characteristics, which may cause it to prefer investments of greater risk than the investors. This is especially true with respect to the fund’s later investments if the early ones have done poorly. In that circumstance, the GP actually may be best served by making negative net present value investments if the investments are sufficiently risky. The same problem arises with respect to operating decisions that concern a portfolio company that is doing poorly. Then the option-like character of the GP’s carried interest may align its interests more closely with those of the entrepreneur whose compensation under the venture capital fund-portfolio company also has option-like characteristics. In that circumstance, both the GP and the entrepreneur will prefer a riskier operating strategy that than would best serve investors.

The venture capital fund’s fixed term, together with the operation of the reputation market, responds to this agency cost problem. The fund’s fixed term assures that at some point the market will measure the GP’s performance, making readily observable the extent to which the GP’s investment decisions favored increased risk over expected return. A GP’s performance record as revealed by its performance in previous funds is its principal tool for persuading investors to invest in successor funds. Thus, the limited partnership’s fixed term assures that opportunistic behavior by the GP with respect to either venture capital fund investment decisions or portfolio company operating decisions will be punished through the reputation market when it seeks to raise the successor funds that justify the GP’s investment in skill and experience in the first place. The expectation of such a settling up helps support the use of intense compensation incentives by constraining option-induced GP opportunism.

Mandatory distribution of the proceeds from realized investments and the venture capital fund’s fixed term also respond to a different variety of agency costs resulting from the allocation of control to the GP. Because the GP receives a fixed fee, typically 2.5 percent, of committed capital, the GP would have an incentive to keep capital within the fund for as long as possible. If given the opportunity, the GP would simply reinvest the proceeds of realized investments. Moreover, that opportunity would make it unnecessary for GP’s to raise successor funds, the anticipation of which allows the reputation market to police GP performance. Mandatory distribution of realized proceeds and a fixed term respond to this potential free cash flow problem. Both devices require that the GP allow the investors to measure its performance against alternatives available in the market before it can continue managing the investors money. In this respect, mandatory distributions operate like debt in a company following a leveraged buyout in requiring profits to be first returned to investors before the company can seek to recover it through new investment. The fixed term operates like a contractually imposed takeover by forcing the GP to allow the investors to choose whether the GP should continue to manage their funds. The organizational and contractual structure assures that a time will come when market price serves as the measure of the GP’s performance.5[[53]](#footnote-53)3

**C. Braiding of the Venture Capital Fund-Portfolio Company and the Investor- Venture Capital Fund Contracts**

A final means by which the organizational and contractual structure of the venture capital-portfolio company and investor-venture capital fund contracts responds to the contracting problems posed by extreme uncertainty, information asymmetry, and agency costs is through the braiding of the two contracts. By braiding we mean the fact that the structure of the two contracts are intertwined, each operating to provide an implicit term that supports the other, and thereby increasing the contractual efficiency of both. This characteristic is particularly apparent with respect to the role of exit and of the reputation market.

1. The Braiding of Exit. As we have seen, the obligation of exit from each of the two contracts comprising the venture capital market – the fixed term of the investor-venture capital fund contract, and the incentive to realize and then distribute the proceeds of the investment that is the subject of the venture capital fund-portfolio company contract – responds to contracting problems presented by each of the relationships. These two functions of exit complement each other. As we saw in Part I, by the time a portfolio company succeeds, the venture capital fund’s non-cash contributions to a portfolio company can be more profitably invested in a new round of early stage companies. But because economies of scope link the provision of cash and non-cash contributions, recycling the non-cash contributions requires the venture capital fund to exit: to recycle its cash contribution from successful portfolio companies to new early stage companies.5[[54]](#footnote-54)4 Moreover, the venture capital fund’s exit provides the means to give the entrepreneur an important performance incentive: a call option on control the exercise of which is implemented by the venture capital fund’s realization of its investment in the portfolio company by means of an IPO.

In turn, the recycling of investments from successful portfolio companies to new early stage companies supports the investor-venture capital fund contract. Realizing portfolio company investments provides a performance measure that lets investors evaluate the GP’s skill and honesty, and to reallocate their funds to the GPs with the most successful performance. And by providing the GP’s principal tool for persuading investors to provide capital for successor funds, exit supports the core of the incentive structure that aligns the interests of investors and the GP.

In sum, the braiding of the role of exit in the investor-venture capital fund contract and the venture capital fund-portfolio company contract increases the efficiency of both contracts.

2. The Braiding of the Reputation Market. The venture capital fund-portfolio company contract responds to a number of problems by shifting important elements of control to the venture capital fund. The venture capital fund’s option to abandon resulting from staged financing, its board representation and even control, and its power to replace the entrepreneur, combine to reduce uncertainty, and to reduce agency costs both by providing the entrepreneur powerful performance incentives including a call option to regain control and, by providing the venture capital fund the means and therefor the incentive to monitor. In turn, the entrepreneur’s willingness to transfer control, and to accept so heavily incentivized a contract structure, reduces information asymmetry by signaling the entrepreneur’s type. However, each of these transfers of discretion from the entrepreneur to the venture capital fund carries with it the potential for opportunistic behavior by the fund. The entrepreneur is at risk in connection with negotiations over the terms of the next round financing, in connection with the venture capital fund’s exercise of control through board influence and its power to replace the entrepreneur, and in connection with the fund’s ability not to honor the implicit call option on control it has written. The efficiency of the venture capital fund-portfolio company contract therefore requires a credible constraint on the venture capital fund’s misusing its transferred discretion.

The braiding of the venture capital fund-portfolio company contract with the investor-venture-capital fund contract supports a reputation market that constrains opportunistic behavior by the venture capital. Because the fund is unlikely to engage in repeated deals with any particular entrepreneur, the reputation market constraint instead grows out of the investor-venture capital fund contract. Because the GP needs to raise successor funds, it will have to make investments in new portfolio companies run by other entrepreneurs. If a GP behaves opportunistically toward entrepreneurs in connection with previous portfolio company investments, it will lose access to the best new investments that, in turn, will make raising successor funds more difficult. The impact of the GP's behavior toward current portfolio companies on the success of its future fund raising efforts serves to police the venture capital fund’s exercise of the discretion transferred to it in the venture capital fund-portfolio company contract. In turn, the investor-venture capital fund contract’s support of the transfer of discretion to the fund by the venture capital fund-portfolio company contract helps reduce uncertainty, information asymmetry, and agency costs in contracting with the portfolio company and therefore results in higher returns to investors. And this encourages investors to reinvest in the GP’s successor funds. Again, the interaction between the two contracts supports the efficiency of each.

1. 1 Black & Gilson, supra note 3, at 249 (Table 3). [↑](#footnote-ref-1)
2. 2 Some institutions also make direct investments, often in the same portfolio company that a venture capital fund in which the institution is a limited partner, is simultaneously investing. [↑](#footnote-ref-2)
3. 3 Under Delaware law, the limited partners can make certain extraordinary decisions, such as replacing the general partner or terminating the partnership. See 6 Del.C. §17-303(b)(8)(e). However, these rights are typically restricted by contract. See Michael C. Halloran, Gregg Vignos & C. Brian Wainwright, Agreement of Limited Partnership, in I Venture Capital and Public Offering Negotiation 1-1 through 1-218 (M. Halloran, R. Gunderson, Jr., & J. del Cavo, eds. 1998) (form of limited partnership agreement with commentary). Venture capital funds frequently do appoint advisory committees, usually made up of investor representatives, that monitor the fund’s performance. See William A. Sahlman, The Structure and Governance of Venture-Capital Organizations, 27 J.Fin. Econ. 473, 493 (1990). [↑](#footnote-ref-3)
4. 4 Adolph A. Berle & Gardiner C. Means, The Modern Corporation and Private Property (1932). [↑](#footnote-ref-4)
5. 5 Even if one treated the venture capitalist’s carried interest as a measure of the value of its human capital contribution, it is still putting up less than 20 percent of the capital but receiving control. [↑](#footnote-ref-5)
6. 6 See Halloran, et al., Agreement of Limited Partnership, supra note \_\_, in Venture Capital and Public Offering Negotion (M. Halloran, L. Benton, R. Gunderson, Jr., & J. del Cavo eds. 1998). Paul Gompers & Josh Lerner, The Use of Covenants: An Empirical Analysis of Venture Capital Limited Partnerships, 39 L.& Econ. 463 (1996), examines the terms of such agreements. [↑](#footnote-ref-6)
7. 7 Sahlman, supra note \_, at 491-92; Agreement of Limited Partnership, supra note \_\_\_, at 1-62 to 1-72.. [↑](#footnote-ref-7)
8. 8 Id., at 491; In most cases, the agreement provides for a breakpoint above which the management fee is reduced, either on funds under management of number of years after the partnership's formation. Halloran, et al., Limited Paratnership Agreement, supra note \_\_. [↑](#footnote-ref-8)
9. 9 Sahlman, supra note \_\_, at 491; Halloran, et al., Agreement of limted Partnership, supra note \_\_, at 1-46. [↑](#footnote-ref-9)
10. 10 Paul Gompers, Ownership and Control in Entrepreneurial Firms: An Examination of Convertible Securities in Venture Capital Investments, Harvard Business School Working Paper (Sept. 1997); Sahlman, supra note \_, at 36. [↑](#footnote-ref-10)
11. 11 Black & Gilson, supra note 3, at 252-255. See William D. Bygrave & Jeffrey A. Timmons, Venture Capital at the Crossroads \_\_\_ (1992); Christopher Barry, New Directions in Venture Capital Research, 23 J. Fin. Mngmnt. 3, \_\_ (1994). [↑](#footnote-ref-11)
12. 12 Josh Lerner, The Syndication of Venture Capital, 23 Fin. Mngmnt. 16 (1994). [↑](#footnote-ref-12)
13. 13 See Paul A. Gompers, Optimal Investment, Monitoring, and the Staging of Venture Capital, 50 J. Fin. 1461 (1995). [↑](#footnote-ref-13)
14. 14 Sahlman, supra note \_\_, at 475, reports that venture capital funds invest one-third of their capital in new investments and two-thirds in later round financing of companies already in their portfolios. [↑](#footnote-ref-14)
15. 15 Gompers, Ownership and Control, supra note \_\_. [↑](#footnote-ref-15)
16. 16 In Gomper’s sample of portfolio company investments, venture capital investors on average controlled the portfolio company’s board of directors, but held only 41 percent of the equity. The venture capital fund’s right to select a specified number of directors is contained in the portion of the portfolio company’s articles of incorporation that sets out the rights, preferences and privileges of the convertible preferred stock the investors receive. This portion of the articles will typically be added by amendment simultaneously with the closing of the venture capital investment. L. Benton & Robert Gunderson, Jr., Portfolio Company Investments: High-Tech Corporation, in Venture Capital and Public Offering Negotion (M. Halloran, L. Benton, R. Gunderson, Jr., & J. del Cavo eds. 1998), sets out a standard form of restated articles of incorporation in connection with a convertible preferred stock venture capital financing. [↑](#footnote-ref-16)
17. 17 See Gompers, Ownership and Control, supra note \_\_. The negative covenants are contained in a different closing document, the investors rights agreement. Benton & Gunderson, supra note \_\_, sets out a form of investors rights agreement with illustrative negative covenants. [↑](#footnote-ref-17)
18. 18 Gompers, Ownership and Control, supra note \_\_; Anat Admati & Paul Pfleiderer, Robust Financial Contracting and the Role of Venture Capitalists, 49 J. Fin. 371 (1994). [↑](#footnote-ref-18)
19. 19 Halloran, et al., supra note \_\_, at 1-20, [↑](#footnote-ref-19)
20. 20 Black & Gilson, supra note 3, at 255-57. This incentive may cause a GP without a performance record with prior funds to harvest investments earlier than would be optimal for the investors in order to establish a record sufficient to allow the raising of a new fund. See Gompers, Ownership and Control, supra note \_\_. [↑](#footnote-ref-20)
21. 21 Black & Gilson, supra note 3, at 248 (Table 1). [↑](#footnote-ref-21)
22. 22 Black & Gilson, supra note 3; Gompers, supra note \_\_ [↑](#footnote-ref-22)
23. 23 This discussion draws on Black & Gilson, supra note 3. [↑](#footnote-ref-23)
24. 24 Venture Economics, Exiting Venture Capital Investments (1988). [↑](#footnote-ref-24)
25. 25 See TAN \_\_ supra. [↑](#footnote-ref-25)
26. 26 Gompers, Ownership and Control, supra note \_\_. [↑](#footnote-ref-26)
27. 27 Fischer Black & Myron Scholes, The Pricing of Options and Corporate Liabilities, 81 J.Pol. Econ. 637 (1973).; Stewart Myers, Determinants of Corporate Borrowing, 5 J.Fin. Econ. 147 (1977). The application of option pricing analysis to transactional and contractual structuring is developed in Ronald J. Gilson & Bernard S. Black, The Law and Finance of Corporate Acquisitions Ch. 7 (2d ed. 1995). [↑](#footnote-ref-27)
28. 28 See note \_\_ supra. [↑](#footnote-ref-28)
29. 29 This is consistent with Milgrom & Roberts “incentive intensity principle,” which predicts that because intense incentives give rise not only to incentives to perform but also to incentives to cheat, intense incentives require a significant investment in monitoring. Paul Milgrom & John Roberts, Economics, Organization & Management, Ch. 7 (1992). [↑](#footnote-ref-29)
30. 30 Brealey & Myers contains an accessible discussion of how to value the option to abandon. Richard Brealey & Stewart Myers, Principles of Corporate Finance (\_\_ ed., 199\_). [↑](#footnote-ref-30)
31. 31 Indeed, the more realistic assumption is that the entrepreneur is risk averse with respect to the success of the portfolio company since, unlike the venture capital fund, she will not hold a diversified portfolio of financial or human capital. [↑](#footnote-ref-31)
32. 32 The venture capital fund’s non-capital contributions are also effectively staged. If the portfolio company has not performed satisfactorily, the GP can decline to make or receive telephone calls from the portfolio company or its suppliers, customers, or prospective employees. See Black & Gilson, supra note 3, at 254. Gompers, Optimal Investment, supra note \_\_, at 1462, likens this incentive to that by the role of debt in a leveraged buyout. The need for additional funds provides a portfolio company the same “hard” constraint provided by the need to pay back debt in a leveraged buyout. [↑](#footnote-ref-32)
33. 33 The signal will result in a separating equilibrium, in which only high quality entrepreneurs will accept the incentive, when the low quality entrepreneurs’ alternatives are more valuable to a low quality entrepreneur than the incentive contract. See Gompers, Ownership and Control, supra note \_\_. [↑](#footnote-ref-33)
34. 34 Black & Gilson, supra note 3, at 261-63. [↑](#footnote-ref-34)
35. 35 See Thomas Hellman, The Allocation of Control Rights in Venture Capital Contracts, \_\_ Rand J.Econ. \_\_ (1998). [↑](#footnote-ref-35)
36. 36 Indeed, it is comonplace for stock options to be awarded to non-management employees, both to create performance incentives and to reduce the cash necessary to fund the portfolio company’s operations. [Cites] [↑](#footnote-ref-36)
37. 37 Sahlman, supra note \_\_, at 507; Benton & Gunderson, supra note \_\_, at \_\_. [↑](#footnote-ref-37)
38. 38 A private value for control is a standard feature in models that seek to explain the incentive function of capital structure. See e.g., Bengt Holstrom & Jean Tirole, The Theory of the Firm III. Capital Structure, in I. Handbook of Industrial Organization 63, 79-86 (Richard Schualansee & Robert Willigs, eds., 1989); Milton Harris & Arthur Raviv, Corporate Governance: Voting Rights and Majority Rule, 20 J.Fin. Econ. 203 (1988); Sanford Grossman & Oliver Hart, One Share-One Vote and the Market for Corporate Control, 20 J. Fin. Econ. 175 (1988). [↑](#footnote-ref-38)
39. 39 Black & Gilson, supra note 3, develop the concept of an implicit contract giving the entrepreneur a call option on control in venture capital contracts. [↑](#footnote-ref-39)
40. 40 Some contracts also provide for automatic conversion when the portfolio company meets specified profit or, less frequently, sales targets. Gompers, supra note \_\_. [↑](#footnote-ref-40)
41. 41 The venture capital fund’s ownership percentage, and therefore control, is further diluted both by the number of new shares sold to the public in the IPO, and by the number of shares sold by the venture capital fund either in the offering or in the period following the offering. Black & Gilson, supra note 3, at 260-61. [↑](#footnote-ref-41)
42. 42 See Alan Brau & Paul A. Gompers, Myth or Reality? The Long Run Underperformance of Initial Public Offerings: Evidence from Venture and Non-Venture Backed Companies, 52 J. Fin. 1791 (1997); William L. Megginson & Kathleen A. Weiss, Venture Capitalist Certification in Initial Public Offerings, 46 J. Fin. 879 (1991); Christopher Barry, Chris Muscarella, John Peavy III & Michael R. Vestsypens, The Role of Venture Capitalists in the Creation of a Public Company, 27 J.Fin. Econ. 447 (1990). [↑](#footnote-ref-42)
43. 43 Need footnote text. [↑](#footnote-ref-43)
44. 44 D. Gordon Smith, Venture Capital Contracting in the Information Age, 2 J. Small & Emerg. Bus. Law 133 (1998), examines the information characteristics of the reputation market for venture capitalists.. [↑](#footnote-ref-44)
45. 45 It is not, however, impossible. Both successful and unsuccessful first round entrepreneurs may found a new start-up company in need of venture capital financing. See Annalee Saxanian, Regional Advantage: Culture and Competition in Silicon Valley and Route 128 39 (1994). [↑](#footnote-ref-45)
46. 46 See David J. Ben Daniel, Jesse R. Reyes, and Michael R. D’Angelo, Concentration and Conservatism in the Venture Capital Industry, working paper (1998). In 1987, the top five percent of firms acting as venture capital fund GPs controlled 20 percent of venture capital raised. The figure rose to 37 percent in 1992, and to 44 percent in 1997. [↑](#footnote-ref-46)
47. 47 Saxanian, supra note \_\_, at 39-40. [↑](#footnote-ref-47)
48. 48 Lerner, supra note \_\_, reports that venture capital providers located within five miles of a portfolio company are twice as likely to have a board representative than providers located more than 500 miles from a portfolio cocmpany. [↑](#footnote-ref-48)
49. 49 Id. at. [↑](#footnote-ref-49)
50. 50 A form of staged financing also appears in the investor-venture capital fund contract. The limited partners reetain the right to withdraw from completing their promised capital commitments, in effect staging the commitment of capital to the venture capital fund. Id. at 502. Sahlman, supra note \_, at 494. Because of the penalties associated with an investor failing to make its contribution following a capital call, the investor’s option to abandon is of little value compared to the fund’s option to abandon written by the portfolio company. [↑](#footnote-ref-50)
51. 51 Empirical evidence of the value of the organizational and contractual structure is beginning to emerge. Christopher Barry & L. Adel Turki, Initial Public Offerings by Development Stage Companies, 2 J. Small & Emerg. Bus. Laws 101 (1998), report that development stage companies that use an IPO as a substitute for venture capital on average experience poor long-term performance. In contrast, the portfolios of venture capital funds on average earn favorable returns. Ronald J. Gilson, Understanding the Choice Between Public and Private Equity Financing of Early Stage Companies: A Comment on Barry and Turki, J. Small & Emerg. Bus. Law 123 (1998), suggests that the different governance structures associated with the t wo forms of development stage financing could explain the different levels of performance. [↑](#footnote-ref-51)
52. 52 See Halloran et al., Agreement of Limited Partnership, supra note \_\_, at I-64 to I-73. [↑](#footnote-ref-52)
53. 53 The absence of these characteristics help explain why closed end investment companies, like American Research and Development Company, the first venture capital fund formed in 1946 before the limited partnership structure was invented, never caught on. [↑](#footnote-ref-53)
54. 54 Black & Gilson, supra note 3, at 254-55. [↑](#footnote-ref-54)